

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended)

A hand-held pen device ~~user unit~~ for ~~writing down and~~ recording a track of handwritten information created by the pen device, comprising:

means for recording said information in a digital format and a memory for storing the same, ~~characterized in that~~ wherein the memory ~~comprises~~ includes:

a first memory unit located in the user unit; and

a second memory unit located in an external data storage device, which memory units are connected in such a way that through transmission of the recorded information from the first memory unit to the second memory unit, the recorded information can exceed the storage capacity of the first memory unit and thereby, from the point of view of the user, they the first memory unit and second memory unit form a coherent memory unit.

Claim 2. (Currently Amended)

A hand-held pen device ~~user unit~~ according to claim 1, further comprising a means for transmission of information between the first and the second memory units, the first memory unit being arranged to receive and store the recorded information from the recording means and the information transmission means being arranged to transfer according to predetermined rules at least a subset of

the recorded information from the first to the second memory unit for storage therein.

Claim 3. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, in which the information transmission means is arranged to carry out exclusively one-way transmission of information from the first to the second memory unit.

Claim 4. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, in which said rules comprise transferring said information when the first memory unit has attained a given level of fullness.

Claim 5. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, in which said rules comprise transferring said information when this has been stored in the first memory unit for a certain period of time.

Claim 6. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, in which the information transmission means is arranged to carry out wireless transmission of information from the pen device ~~user-unit~~.

Claim 7. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, in which the information transmission means is arranged to transfer all the recorded information to the second memory unit.

Claim 8. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 2, which is arranged, after recording a "send" command, to send all information associated with the "send" command and stored in the first and second memory units to an external information management unit.

Claim 9. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 8, in which the information transmission means is arranged, after recording the "send" command, to send a subset of the recorded information associated with the "send" command from the first memory unit to the second memory unit.

Claim 10. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 1, in which the recorded information comprises a plurality of absolute positions that form an electronic version of the handwritten information.

Claim 11. (Currently Amended)

3 A hand-held pen device ~~user-unit~~ according to claim 9, which is arranged, after recording the "send" command, to obtain an address for the information management unit, by a request to an external look-up unit and on the basis of said positions.

Claim 12. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 11, which is arranged to obtain said address via a communication unit in the external data storage device.

Claim 13. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 1, in which the second memory unit has a data storage capacity that is considerably larger than the data storage capacity of the first memory unit.

Claim 14. (Currently Amended)

A hand-held pen device ~~user unit~~ according to claim 1, in which said means for recording handwritten information comprises an image sensor for optical recording of a position code on a base.

Claim 15. (Currently Amended)

A hand-held pen device ~~user unit~~, comprising:

a means for recording a track of handwritten information created by the pen device; and

a means for transferring information from the pen device ~~user unit~~, the pen device ~~user unit~~ in a first memory management mode being arranged to store the recorded information in an internal memory unit and, after detection of a "send" command, to communicate at least a subset of the recorded information by means of the information transmission means,

~~characterized in that it is~~ the information transmission means being switchable to a second memory management mode, in which the information transmission means is caused to transfer the recorded information automatically from the internal memory unit to an external memory unit in an external data storage device in such a way that by said transfer the recorded information can

exceed the storage capacity of the internal memory unit and thereby, from the point of view of the user, the memory units form a coherent memory unit.

Claim 16. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 15, which, in the second memory management mode and after the detection of the "send" command, is arranged to cause the information transmission means to transfer the "send" command and all information associated with the "send" command in the internal memory unit to the external memory unit.

Claim 17. (Currently Amended)

A hand-held pen device ~~user-unit~~ according to claim 15, which, in the second memory management mode, is arranged to carry out exclusively one-way transmission of information from the internal to the external memory unit, and to communicate all information associated with the "send" command via a communication unit in the external data storage device.

Claim 18. (Currently Amended)

A system for information management, comprising:  
an information management unit; and

a hand-held pen device ~~user unit~~ which is designed for ~~writing down and~~ recording a track of handwritten information created by the pen device, the pen device ~~user unit~~ being arranged to store the recorded information in a memory and to communicate a required part thereof to the information management unit via a communication network, ~~characterized in that~~ wherein the memory ~~comprises~~ includes:

a first memory unit located in the pen device ~~user unit~~; and

B a second memory unit located in an external data storage device, which memory units are connected in such a way that through a transmission of the recorded information from the first memory unit to the second memory unit the recorded information can exceed the storage capacity of the first memory unit and thereby, from the point of view of a user, they the first memory unit and the second memory unit form a coherent memory unit.

Claim 19. (Currently Amended)

A system according to claim 18, in which the first memory unit is arranged to receive and store the recorded information and in which the pen device ~~user unit~~ is arranged to transfer in accordance with predetermined rules at least a subset of the recorded information from the first to the second memory unit for storage therein.

Claim 20. (Currently Amended)

A system according to claim 19, in which the pen device ~~user unit~~ is arranged to carry out exclusively one-way transmission of information from the first to the second memory unit, and to communicate the required part of the recorded information to the information management unit via a communication unit in the external data storage device.

Claim 21. (Previously Presented)

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A system according to claim 18, which is arranged, after recording a "send" command, to send all the information associated with the "send" command and stored in the first and second memory units to the information management unit.

Claim 22. (Currently Amended)

A system according to claim 21, in which the pen device ~~user unit~~ is arranged, after recording the "send" command, to send a subset of the recorded information associated with the "send" command, from the first memory unit to the external data storage device.

Claim 23. (Currently Amended)

A system according to claim 21, further comprising a base with a position code, in which the pen device ~~user unit~~ comprises an image sensor for optical



recording of the position code and a processor unit for converting the recorded position code into absolute positions that form an electronic version of the handwritten information, and in which the pen device ~~user-unit~~ is arranged to obtain an address for the information management unit, after recording the "send" command, by a request to an external look-up unit and on the basis of said positions.

Claim 24. (Currently Amended)

A system according to claim 23, in which the pen device ~~user-unit~~ is arranged to obtain said address via a communication unit in the external data storage device.

Claim 25. (Currently Amended)

A system according to claim 18, in which the external data storage device comprises a network server with an interface that allows a user of the pen device ~~user-unit~~ to access the recorded information.

Claim 26. (Currently Amended)

A method for providing memory capacity for a user of a hand-held pen device ~~user-unit~~ which is designed for recording and communicating a track of handwritten information created by the pen device, comprising the steps of:

reserving memory capacity for the pen device ~~user-unit~~ in an external data storage device;

receiving, automatically, recorded information from a memory located in the pen device ~~user-unit~~ and storing the same in the external data storage device, and sending the recorded information to an information management unit in response to a "send" command.

Claim 27. (Previously Presented)

13 A method according to claim 26, comprising the step of charging the user on the basis of the memory capacity reserved for the user in the external data storage device.

Claim 28. (Previously Presented)

A method according to claim 26, comprising the step of storing the received information for a predetermined period of time from the time of recording, the user being charged on the basis of the length of the period of time.

Claim 29. (Currently Amended)

A method according to claim 26, in which the "send" command is received from the pen device ~~user-unit~~.

Claim 30. (Currently Amended)

3 A method for memory management in a ~~user-unit~~ pen device, which is arranged to record a track of handwritten information created by the pen device, comprising the ~~characterized by~~ the steps of:

storing the recorded information in a first memory unit in the pen device ~~user-unit~~; and

transferring at least a subset of the recorded information from the first memory unit to a second memory unit in an external data storage device in such a way that the recorded information can exceed the storage capacity of the first memory and thereby, from the point of view of a user, the first and second memory units form a coherent memory unit.